

Office of Undergraduate Research – University of Utah
UROP Learning Outcomes Report (Spring 2016)

Undergraduate Research Learning Outcomes

- Identify and utilize relevant previous work that supports their research
- Articulate a timely and important research question or creative objective
- Identify and utilize appropriate methodologies to address the research question or creative objective
- Meet the relevant field's standards for the responsible conduct of research, and effectively navigate challenges that arise in the research process
- Work collaboratively with other researchers, demonstrating effective communication and problem-solving skills
- Present the research effectively in a conference setting and a written publication
- Reflect constructively on their research experience, identifying what was learned, personal strengths and opportunities for growth, and how the experience informs their future educational and career goals

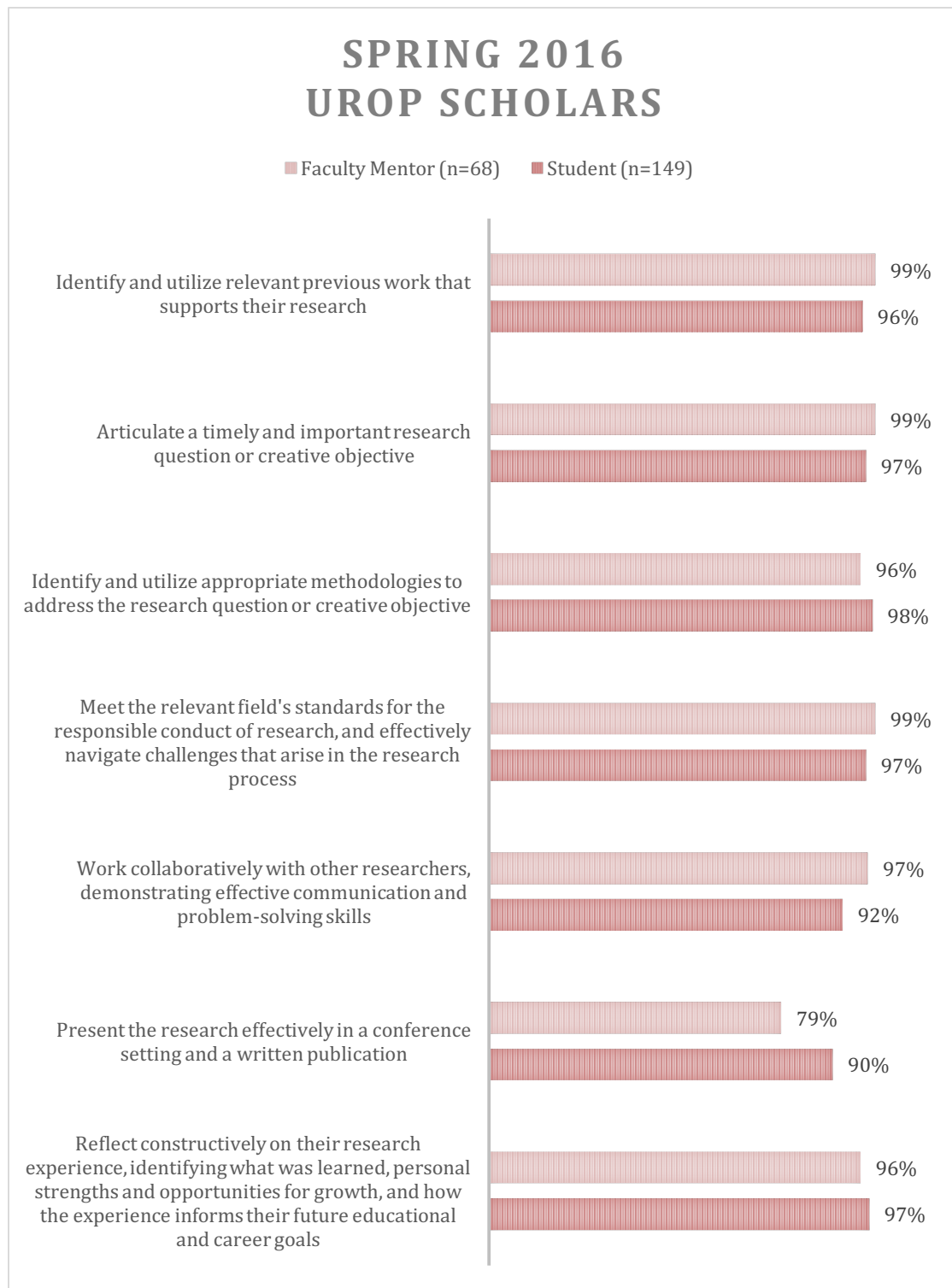
It is important to note that these learning outcomes are designed for the entirety of a student's experience in undergraduate research, up to the point of graduation. For this reason, we do not expect high agreement rates for all outcomes, in particular the outcome concerning presentation and publication, as students are unlikely to have presented or published their work by the end of the first semester of UROP participation.

Assessment Procedures: All Spring 2016 UROP students and their faculty mentors were invited to complete an online learning outcomes assessment at the end of the Spring 2016 semester. Students complete the assessment as part of their required UROP final report; faculty participation was optional. The response rate by students was 75% for UROP students. The faculty response rate was 34%.

For each learning outcome individually, students were asked to respond “Strongly Disagree”, “Disagree”, “Agree”, or “Strongly Agree” to the prompt: “In my opinion, my undergraduate research experience has helped me to...[learning outcome]”. Faculty were asked to respond using the same four response options to the prompt: “Through participation in UROP this semester under your mentorship, the student has learned to...[learning outcome]”.

Data:

The following presents the percent of respondents who responded either “Strongly Agree” or “Agree”, by learning outcome.



Observations:

- Students tend to see their UROP experience as supporting the learning outcomes. Faculty mentors and students are generally in agreement with each other.
- The lowest agreement score is associated with the presentation and publication outcome, especially in the first semester of UROP. This is unsurprising, given that students normally are not ready to present or publish their work by the end of the first, or even the second, semester of UROP.
- Most notable in the data presented here is the marked increase in participation by UROP faculty mentors in the assessment process. Relative to the 21% response rate in Fall 2015, Spring 2016 had a 34% response rate from faculty. We hypothesize that this is the result of increased familiarity on the part of faculty with the assessment process.